TRANSLATIONAL SCIENCE AWARD

The MICHR Pilot Grant Program (PGP) is requesting applications for innovative research projects that address areas of translational and clinical research. The PGP’s goal is to promote development of novel solutions that will ultimately improve patient and community health outcomes. Applications for pilot grants can be submitted for projects within the translational spectrum using one of the three approaches detailed below. The proposed work should, in some way, meet the overall MICHR PGP’s goals to:

- Drive translation of scientific concepts from the benches of basic scientists to clinical investigators, and from the bedside to community practice;
- Stimulate research that addresses community-identified health priorities;
- Positively impact clinical outcomes and community health;
- Establish new research programs and/or collaborations;
- Augment the number of clinical/translational research investigators; and
- Increase extramural funding and publications.

THE TRANSLATIONAL SPECTRUM

According to the National Center for Advancing Translational Sciences (NCATS), “the translational science spectrum represents each stage of research along the path from biological basis of health and disease to interventions that improve the health of individuals and the public. The spectrum is not linear or unidirectional; each stage builds upon and informs the others.” In other words, translation is the process of turning observations in the laboratory, clinic, and community into interventions that improve the health of individuals and the public. MICHR supports research at each translational stage (T1-T4) as described below:

**T1 (Translation to Humans):** Goal is to identify and analyze the effects of an intervention or relationship on the human condition or environment. Findings from basic research are tested for clinical effect and/or applicability.

Examples include: first-in-human studies, human physiology

**T2 (Translation to Patients/ Clients):** Goal is to identify and analyze the optimal effects of an intervention or relationship on the human condition or environment. New interventions are tested under controlled environments to form the basis for clinical application and evidence-based guidelines.

Examples include: phase 2 clinical trials, development of evidence-based practices

**T3 (Translation to Practice):** Goal is to incorporate into practice the optimal intervention or relationship. Research at this stage explores ways of applying recommendations or guidelines in real-world settings such as clinical practice and community settings.

Examples include: health services research, comparative effectiveness research

**T4 (Translation to Population Health):** Goal is to provide communities with the optimal intervention or relationship. Research at this stage studies factors and interventions that influence the health of populations.

Examples include: health policy research, social determinants of health

RESEARCH APPROACH – IDENTIFYING THE RIGHT FIT FOR YOUR RESEARCH

MICHR encourages and funds three approaches to research, and applicants should use the approach that is best suited to their research program. These approaches exist along a continuum that has varying levels of engagement between partners within and outside of the University of Michigan. The MICHR Pilot Grant Program supports all translational and clinical researchers and encourages
applicants to identify collaborations that will most effectively bridge the gap to translation. No preference is given to any approach. The three approaches include:

- **Investigator-Initiated Research:** Research that is planned, conducted, and led by an academic investigator or team of investigators.
- **Collaborative Research:** Research that involves the input and participation of partners (e.g. patients, families, clinicians, community members, community-based organizations) in some aspects of the research process.
- **Community-Based Participatory Research:** Research initiated in full partnership with communities that requires equitable involvement of partners in all aspects of the research process.  

For this funding opportunity, “community” refers to groups of people affiliated by similar characteristics, such as identities (e.g. gender, racial), geographic location (e.g. city of Flint), specific interests (e.g. coalition to reduce childhood obesity), and/or situations that affect the well-being of that group. MICHR encourages researchers to consider whether and to what extent research could be enhanced through engagement and partnership with communities, especially with communities that have been historically excluded from health research. Varying levels of engagement are illustrated in the examples below:

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<th>Investigator-Initiated</th>
<th>Collaborative</th>
<th>Community-Based Participatory</th>
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<tr>
<td><strong>Research objective</strong></td>
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<td></td>
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<tr>
<td><strong>Study design</strong></td>
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<td><strong>Funding</strong></td>
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**APPLICATION PROCESS**

- Applications must be submitted using Competition Space.
- Identify appropriate approach for your research project: Investigator-Initiated, Collaborative Research, or Community-Based Participatory Research. Within each approach, select the translational stage (T-stage) that best describes the proposed research. Please see the approach-specific guidelines for information on application requirements and restrictions.
- Funding level and cost-share requirements vary based on the track selected (range: $30K-$50K). See specific guidelines for more information.
- The duration is one year for all projects.
- All U-M faculty are eligible to apply; however, projects from senior investigators must demonstrate how this is a new research direction including new collaborations. For further information, please see the guidelines.
- Partners outside U-M should refer to the guidelines for application requirements specific to each approach.
- Awarded projects that involve human subjects will be required to submit documentation to NCATS prior to the funding being released.